

REMARKS

Claims 42 and 44-53 have been canceled without prejudice. Claims 25 and 30 have been amended and Claims 59-66 have been added to the application. Claims 25, 27-33 and 59-66 are pending.

Claims 25 and 30 have been amended to recite “consisting of an amino acid sequence that is at least 90% similar,” and to recite that amino acid sequence similarity is determined using the BLAST 2 sequences algorithm with default parameters. Support for the amended Claims is found in the subject application at page 41, Table 1, and at the paragraph bridging pages 22 and 23. Support is also found in the priority application (U.S. Patent Application No. 60/172,881) at page 35, Table 1, and at the paragraph bridging pages 17 and 18.

Support for new Claims 59-63 is found, for example, at page 41, Table 1; the paragraph bridging pages 22 and 23; page 21, lines 22-24; page 24, lines 18-29; and original Claims 27-29 and 31-33. Support is also found in the priority application (U.S. Patent Application No. 60/172,881) at page 35, Table 1; the paragraph bridging pages 17 and 18; page 16, lines 23-25; page 19, lines 15-25; and Claims 27-19 and 31-33.

The pending claims find support in the application as filed, and in the priority application as filed. Therefore, this amendment adds no new matter.

Paragraphs 6 and 7. Rejection of Claims 25 and 27-33 Under 35 U.S.C. § 112, First Paragraph, and Denial of Claimed Priority.

Claims 25 and 27-33 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner states that she was unable to find support for the claims in the subject application or in the priority application.

Support for the amended claims in the subject application and the priority application has been pointed out with specificity above. Withdrawal of the rejection and acknowledgment of Applicant's priority claim is requested.

Paragraph 10. Rejection of Claims 25, 27, 30 and 33 Under 35 U.S.C. § 102(b)

Claims 25, 27, 30 and 33 are rejected under 35 U.S.C. § 102(b) as being anticipated by Pereira *et al.*, *J. Esp. Med.*, 174:179-191 (1991) (Reference AX of record) as evidenced by

Stratagene, Product Info - pBlueScript® II Phagemid Vector and map associated with ATCC Accession No. 87047. The Examiner states that Pereira *et al.* teach a *T. cruzi* neuraminidase sequence that comprises SEQ ID NO:14, and that SEQ ID NO:14 corresponds to residues 379-393 of the neuraminidase. The Examiner further states that this disclosure anticipates Claim 25 in so far as Claim 25 recites an amino acid sequence that “has” at least 90% amino acid sequence identity to SEQ ID NO:14. The Examiner interprets the word “has” in Claim 25 as being the equivalent of the word “comprises,” and concludes that Claim 25 reads on the neuraminidase of Pereira *et al.* Dependent Claim 27 is also rejected based on this rationale.

With respect to Claims 30 and 33, the Examiner states that Pereira *et al.* teach that Clone 7F was expressed using the vector pBluescript and that this expression resulted in production of a fusion protein. In support of this conclusion the Examiner points to a map of the pBlueScript® II Phagemid Vector which indicates that the pBlueScript® II Phagemid Vector includes a LacUV5 promoter region, which the Examiner refers to as a “fusion partner.”

Claims 25 and 30 have been amended to more clearly point out the claimed subject matter by deleting the word “has.” Claims 25 does not read on the neuraminidase disclosed by Pereira *et al.*

With respect to Claim 30, it is noted that the Examiner’s conclusion is based on information obtained from the map of pBlueScript® II Phagemid Vector. However, as the Examiner states, Pereira *et al.* used pBluescript to express their neuraminidase not pBlueScript® II Phagemid Vector. Accordingly, Stratagene, Product Info - pBlueScript® II Phagemid Vector and the map associated with ATCC Accession No. 87047 do not provide evidence that supports the rejection. Nonetheless, amended Claim 30 does not read on a fusion protein that comprises the neuraminidase disclosed by Pereira *et al.*

In view of the forgoing, independent Claims 25 and 30 and dependent Claims 27 and 33 do not read on subject matter disclosed by Pereira *et al.* and are not anticipated. Withdrawal of the rejection is requested.

Paragraph 11. Rejection of Claim 25 and 27-33 Under 35 U.S.C. § 103(a).

Claims 25 and 27-33 are rejected under 35 U.S.C. § 103(a) as being obvious over Pereira *et al.*, *J. Esp. Med.*, 174:179-191 (1991) (Reference AX of record) in view of Chuenkova *et al.*, *Mol. Biol. of the Cell*, 11:1487-1498 (2000) (Reference AU of record).

Chuenkova *et al.* was published after the December 20, 1999 filing date of the priority application (U.S. Application No. 60/172,881), and is not prior art under 35 U.S.C. § 102 for subject matter was disclosed in the priority application in a manner that is adequate to meet the requirements of 35 U.S.C. § 112. As discussed above, the amended claims are supported by the priority application. Accordingly, Chuenkova *et al.* is not prior art and cannot be relied upon for a rejection under 35 U.S.C. § 103.

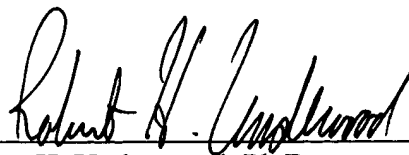
Withdrawal of the rejection is requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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